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| 10/521,155  | 01/13/2005  | Ilkka Westman        | 800.0197.U1(US)     | 9041             |
| 29683   | 7590        | 12/08/2009           | EXAMINER            |                  |
| HARRINGTON & SMITH, PC<br>4 RESEARCH DRIVE, Suite 202<br>SHELTON, CT 06484-6212 |             |                      | HO, DUC CHI         |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2465                |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/521,155 | <b>Applicant(s)</b><br>WESTMAN ET AL. |  |
|                              | <b>Examiner</b><br>DUC C. HO         | <b>Art Unit</b><br>2465               |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 42-45, 48-61 and 80-88 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 42-45, 48-61 and 80-88 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

***Response to Amendment***

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

***Allowable Subject Matter***

2. The indicated allowability of claim 86 is withdrawn in view of the newly discovered reference(s) to the 3GPP. Rejections based on the cited reference follow.

***Claim Rejections - 35 USC § 101***

3. Claims 42-45, 48-60 and 84-88 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory “process” under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. See page 10 of *In Re Bilski* 88 USPQ2d 1385. Regarding claim 42, the instant claim neither positively tied to a particular machine that accomplishes the claimed method steps nor transform underlying subject matter, and therefore do not qualify as a statutory process. The same remark applies to claim 84.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 45, 56-57 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 45 is ambiguous. It is unclear as to what the intended claiming limitation for “checking requirements of message or set of messages or session from the message or message set or session set up request” is after the step “if the first type of address is transformable to the second type of address” in line 4. Is this checking requirements the same step performed in claim 42, a default step or something else?

Claim 56 recites the limitation “the database” in line 1. There is insufficient antecedent basis for this limitation in the claim. The same remark applies to claim 57.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

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6. Claims 42-45, 48-50, 55-58, and 60 are rejected under 35 U.S.C. 102(e) as being anticipated by the admitted prior art of the instant application, pages 1-4, hereinafter referred to as the APA.

Regarding claim 42, the APA discloses a method for routing a E.164 message from a user in an originating network to a subscriber in the terminating network via a foreign network, wherein the originating network and the foreign (target) network are considered the first and the second network, respectively. The E.164 represents the international phone numbering system, or the E.164 identity, which is considered as a first type of address.

*checking requirements of message or set of messages or session from the message or message set or session set up request* (checking if the E.164 message or the E.164 number is a valid IMS identity, since the foreign operator uses the same number range for IMS and non-IMS, see page 1, lines 18-35), *and*

*deciding based on the result of the requirements checking step, on the routing of the message or message set or session setup request* (if the E.164 message is a valid IMS, the message would be routing to an own MGCF in the target network, see page 2, lines 27-35),

*wherein the requirements include at least one of media requirements or QOS requirements of the message, set of messages, or requested session* (the step of checking if the E.164 being a valid IMS includes obtaining the valid IMS identity in the trusted networks or in the target network. The requirement being in a trusted network is considered as media requirement, see page 2, lines 21-28).

Regarding claim 43, the E.164 number of a called party is inherently checked at the ENUM-DNS DNS database to see whether the called number is contained there, if not a new address is derived for routing the called number to the target network, wherein the message will be forwarded to a contact point at the derived address, see pages 1-2.

Regarding claim 44, the derived address could be performed at an another ENUM-DNS in the trusted networks, see page 2, lines 21-28.

Regarding claim 45, the E.164 number of a called party is inherently checked at the ENUM-DNS database to see whether the called number is contained there, if not a new address for routing the called number to the target network. Further, the E.164 will be checked whether it is a IMS or non-IMS identity.

Regarding claim 48, in the APA a serving call state control function (S-CSCF) performs the requirement checking step, see page 2, lines 3-12.

Regarding claim 49, a control function of the MGCF is inherently perform the requirement checking, see page 2, lines 30-35.

Regarding claim 50, the APA discloses routing a E.164 message in the originating or foreign network using S-CSCF and breakout gateway BGCF and the databases, see pages 1-3.

Regarding claim 55, the contact point is a gateway control function of the MGCF, see page 2, lines 21-35.

Regarding claim 56, the APA discloses the first database is an ENUM DNS database and the database comprises IMS E. 164 identities of the subscribers who have the first network as a home network, see page 1.

Regarding claim 57, the APA discloses the first database contains E. 164 identities of trusted operators, see page 1(C3).

Regarding claim 58, the APA discloses the first type of address is an E. 164 identity and the second type of address is for a network element for routing the E.164, i.e. MGCF, see page 3-line 24.

Regarding claim 60, a called party number in the format of E.164 message must be inherently initiated in the originating or the first network. The message will be routed to the media gateway MGCF of the target or the second network, see page 2, lines 21-35. The message will be routed to a control function of the MGCF.

Claim 61 has similar limitations as claim 42. Therefore, it is rejected under claim 42 for the same reasons set forth in the rejection of claim 42. The system of the APA inherently includes a router for performing the claimed steps.

Claim 80 has similar limitations as claims 42-43. Therefore, it is rejected under claims 42-43 for the same reasons set forth in the rejection of claim 42. The system of the APA inherently includes an apparatus, i.e. a router, for performing the claimed steps.

Regarding claims 81-82, these claims have similar limitations as claims 48-49, respectively. Therefore, they are rejected under the APA for the same reasons set forth in the rejection of claims 48-49.

Claim 83 has similar limitations as claim 42. Therefore, it is rejected under claim 42 for the same reasons set forth in the rejection of claim 42. The system of the APA inherently includes an apparatus, i.e. a router, that includes means for performing the claimed steps.

Claim 84 has similar limitations as claim 80. Therefore, it is rejected under claim 42 for the same reasons set forth in the rejection of claim 80.

Regarding claim 85, the step of checking if the E.164 being a valid IMS includes obtaining the valid IMS identity in the trusted networks or in the target network. The requirement being in a trusted network is considered as media requirement, see page 2, lines 21-28.

Regarding claims 87-88, these claims have similar limitations as claims 48-49, respectively. Therefore, they are rejected under the APA for the same reasons set forth in the rejection of claims 48-49.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various



claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

9. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over the APA, in view of Pirkola et al. (WO 00/79825-IDS record), hereinafter referred to as Pirkola.

Regarding claim 51, the APA discloses all claimed limitations, except a control function, comprising a dividing gateway control function, performs the requirement checking and takes care of routing incoming traffic from Internet protocol multimedia networks.

Pirkola discloses gateway, system and method for supporting roaming. The gateway function 210A-fig.2 interfaces mobile IP telephony networks allowing roaming. Consequently, the gateway 210A takes care of routing incoming traffic from IP networks, see abstract.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to employ a gateway as taught by Pirkola into the system of the APA. The suggestion/motivation for doing so would have been to provide an efficient interface for services exchange between packet-switched communications networks and mobile IP networks.

10. Claims 52-53, 86 are rejected under 35 U.S.C. 103(a) as being unpatentable over the APA, in view of the 3GPP TS 23.228 V5.5.0., page 32 (IDS record), hereinafter referred to as the 3GPP.

Regarding claim 52, the APA discloses all claimed limitations, except an interrogating element for routing the message, message set, or session setup request.

The 3GPP discloses in page 32, “5.1.3” procedures relating to interrogating -CSCF.

A DNS-based mechanism for selecting the I-CSCF shall be used to allow requests to be forwarded to an I-CSCF based, for example, on the location or identity of the forwarding node.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to employ a interrogating call state control function (I-CSCF) as taught by the 3GPP into the system of the APA. The suggestion/motivation for doing so would have been to provide a path from the BGCF to the I-CSCF for routing the message to the target network.

Regarding claim 53, in the APA a database ENUM-DNS in the second network or a network in the trusted networks to indicate whether the E.164 is a valid IMS identity, see page 2, lines 30-35.

Regarding claim 86, the APA discloses all claimed limitations, except the checked requirement include QoS requirements of the message, message set, or requested session.

The 3GPP discloses the QoS requirements for an Internet Multimedia core network (IM CN) subsystem session, see page 18. The QoS are (1) independence between QoS signaling and Session control; (2) Necessity for End-to-End-QoS Signaling and Resource-Allocation; (3) QoS Signalling at Different Bearer Service Control Levels.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to employ a QoS mechanism as taught by the 3GPP into the system of the APA. The suggestion/motivation for doing so would have been to guarantee the QoS requirement associated with the selection, deployment, initiation and termination in a IP multimedia network.

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11. Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over the APA, in view of J. Rosenberg et al. (Network Working Group, RFC:3261; abstract page 1/182, pages 138/182; IDS record), hereinafter referred to as Rosenberg.

Regarding claim 59, the APA discloses all claimed limitations, except the routable internet protocol multimedia subsystem is a session initiation protocol uniform resource identifier (SIP URI).

Rosenberg discloses SIP invitations used to create session carry session descriptions, and SIP used to implement provider call-routing policies, and feature to user, see abstract.

SIP or SIP URI identifies a communications resource. They contain sufficient information to initiate and maintain a communication session with the resource.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to employ SIP URI as taught by Rosenberg into the system of the APA. The suggestion/motivation for doing so would have been to provide sufficient information to initiate and maintain a communication session with the resource when the E.164 is a valid IMS identity and one or more NAPTR is used for forwarding the message to the to the target network.

### ***Response to Arguments***

11. Applicant's arguments with respect to claims 42, 61, 80, 83, and 84 have been considered but are moot in view of the new ground(s) of rejection.

### ***Allowable subject matter***

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12. Claim 54 is objected to as being independent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and if claim 42 overcome the 101 rejection.

### ***Conclusion***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Ho whose telephone number is (571) 272-3147. The examiner can normally be reached on Monday through Thursday from 7:30 am to 6:00 pm.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel, can be reached on (571) 272-2988.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

/DUC C HO/

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Primary Examiner, Art Unit 2465

12-05-09